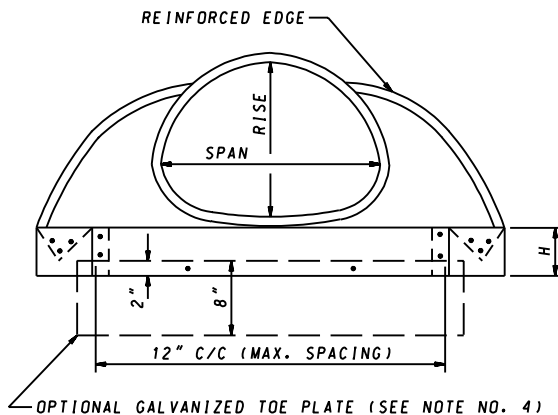
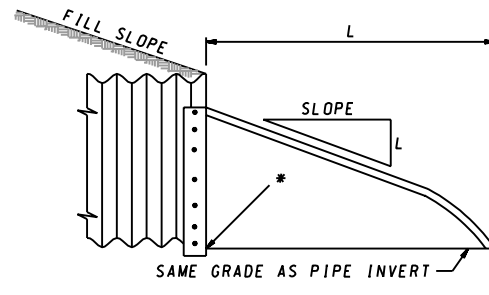


PLAN



END VIEW

DIMENSIONS									
PIPE ARCH DIMENSIONS	GA.	A	B	H	L	W	APPROX. SLOPE	UNIT	
SPAN RISE									
17" 13"	16	7"	9"	6"	19"	30"	2½	1 PC.	
21" 15"	16	7"	10"	6"	23"	36"	2½	1 PC.	
24" 18"	16	8"	12"	6"	28"	42"	2½	1 PC.	
28" 20"	16	9"	14"	6"	32"	48"	2½	1 PC.	
35" 24"	14	10"	16"	6"	39"	60"	2½	1 PC.	
42" 29"	14	12"	18"	8"	46"	75"	2½	1 PC.	
49" 33"	12	13"	21"	9"	53"	85"	2½	2 PC.	
57" 38"	12	18"	26"	12"	63"	90"	2½	2 OR 3 PC.	
64" 43"	12	18"	30"	12"	70"	102"	2¼	2 OR 3 PC.	
71" 47"	12	18"	33"	12"	77"	114"	2¼	3 PC.	
77" 52"	12	18"	36"	12"	77"	126"	2	3 PC.	
83" 57"	12	18"	39"	12"	77"	138"	2	3 PC.	



SIDE VIEW

NOTES

- ALL 3 PIECE UNITS 12 GA. SIDES AND 10 GA. CENTER PANELS (EXCEPT 57"x 38" AND 64"x 43" PIPES, ALL PANELS SHALL BE 12 GA.). WIDTH OF CENTER PANELS TO BE GREATER THAN 20% OF THE PIPE PERIPHERY. MULTIPLE PANEL UNITS TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 3/8" Ø GALVANIZED RIVETS OR BOLTS.
- FOR THE 77"x 52" AND 83"x 57" SIZES, REINFORCED EDGE TO BE SUPPLEMENTED BY 2"x 2"x 1/4" GALVANIZED ANGLES. THE ANGLES ARE TO BE ATTACHED BY 3/8" Ø GALVANIZED NUTS AND BOLTS.
- ANGLE REINFORCEMENT WILL BE PLACED UNDER THE CENTER PANEL SEAMS ON THE 77"x 52" AND 83"x 57" SIZES.
- TOE PLATE SHALL BE USED WHEN SPECIFIED ON THE PLANS. COST OF TOE PLATE TO BE INCLUDED IN BID PRICE PER EACH OF METAL END SECTION.
- TYPE 3 CONNECTION INCLUDES ONE FOOT OF PIPE LENGTH FOR 64"x 43" THRU 83"x 57" DIAMETER AS A CONNECTOR SECTION. THE CONNECTOR SECTION WILL BE ATTACHED TO THE END SECTION BY GALVANIZED RIVETS OR BOLTS. SEE STANDARD MD 370.11.
- WHERE END SECTION IS TO BE APPLIED TO A STRUCTURAL PLATE PIPE ARCH, THE END SECTION SHALL BE ORDERED WITHOUT THE ONE FOOT OF PIPE LENGTH AS STIPULATED IN NOTE 5; INSTEAD, DRILL HOLES AND FIELD BOLT THE END SECTION DIRECTLY TO THE STRUCTURAL PLATE PIPE ARCH.

SPECIFICATION 303	CATEGORY CODE ITEMS										
APPROVED <i>Kirk G. McCall</i> DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT											
SHA State Highway Administration	<table> <tr> <td>APPROVAL • SHA REVISIONS</td><td>APPROVAL • FEDERAL HIGHWAY ADMINISTRATION</td></tr> <tr> <td>APPROVAL 8-28-86</td><td>APPROVAL 12-12-86</td></tr> <tr> <td>REVISED 10-1-01</td><td>REVISED</td></tr> <tr> <td>REVISED</td><td>REVISED</td></tr> <tr> <td>REVISED</td><td>REVISED</td></tr> </table>	APPROVAL • SHA REVISIONS	APPROVAL • FEDERAL HIGHWAY ADMINISTRATION	APPROVAL 8-28-86	APPROVAL 12-12-86	REVISED 10-1-01	REVISED	REVISED	REVISED	REVISED	REVISED
APPROVAL • SHA REVISIONS	APPROVAL • FEDERAL HIGHWAY ADMINISTRATION										
APPROVAL 8-28-86	APPROVAL 12-12-86										
REVISED 10-1-01	REVISED										
REVISED	REVISED										
REVISED	REVISED										

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
 STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

STANDARD METAL END SECTION METAL PIPE ARCH

STANDARD NO. MD 371.01